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# PATENT ABSTRACTS OF JAPAN

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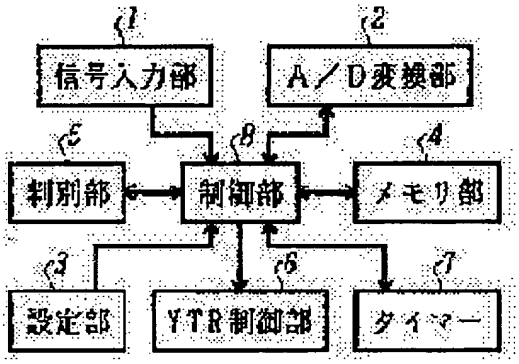
## (54) IMAGE RECORDER

(57)Abstract:
PURPOSE: To execute the timer video recording at the start of broadcasting of the pertinent program when a broadcasting time of the continuous broadcasting program set on the timer video recording is delayed.
CONSTITUTION: A sound signal, etc., from a signal input part 1 are inputted in an A/D conversion part 2, properly sampled by a signal from a setting part 3 and converted to a digital signal corresponding to the signal amplitude. The signal is stored in a memory part 4. When a sound signal, etc., of a television broadcasting, etc., is inputted from the signal input part, the signal is converted into a digital signal by the A/D conversion part, inputted in a discrimination part 5, compared with the data read out from the memory part through a control part 8, and the timer video recording is stopped through a VTR control part 6, when it is less than the desired coincidence factor and the timer video recording is started when it is more than the desired coincidence factor.




LEGAL STATUS

[Date of request for examination]

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[Date of final disposal for application]

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CLAIMS

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[Claim(s)]
[Claim 1] The sound signal input section which inputs a sound signal, and the signal amplitude detecting element which samples the signal from the sound signal input section, and detects the amplitude, The distinction section which distinguishes coincidence as compared with the data which read the amplitude of the signal sampled from the sound signal of broadcast inputted from the memory section which memorizes the signal from a signal amplitude detecting element, and the sound signal input section from the memory section, Image recording equipment constituted so that it might become by the VTR control section which controls image recording equipment based on the signal from the distinction section etc., and the control section which controls said sound signal input section, a signal amplitude detecting element, the memory section, the distinction section, and a VTR control section and image transcription actuation might be started based on the signal from the distinction section.
[Claim 2] The sound signal input section which inputs a sound signal, and the signal amplitude detecting element which samples according to the frequency set up more suitably [ signal ] than the sound signal input section, and detects the amplitude, The distinction section which distinguishes coincidence as compared with the data which read the amplitude of the signal sampled from the sound signal of broadcast inputted from the memory section which memorizes the signal from a signal amplitude detecting element, and the sound signal input section from the memory section, Image recording equipment constituted so that it might become by the VTR control section which controls image recording equipment based on the signal from the distinction section etc., and the control section which controls said sound signal input section, a signal amplitude detecting element, the memory section, the distinction section, and a VTR control section and image transcription actuation might be started based on the signal from the distinction section.
[Claim 3] The video-signal input section which inputs a video signal, and the signal amplitude detecting element which samples the signal from the video-signal input section, and detects the amplitude, The distinction section which distinguishes coincidence as compared with the data which read the amplitude of the signal sampled from video signals, such as television broadcasting inputted from the memory section which memorizes the signal from a signal amplitude detecting element, and the video-signal input section, from the memory section, Image recording equipment constituted so that it might become by the VTR control section which controls VTR based on the signal from the distinction section, and the control section which controls said video-signal input section, a signal amplitude detecting element, the memory section, the distinction section, and a VTR control section and image transcription actuation might be started based on the signal from the distinction section.

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[Translation done.]

## DETAILED DESCRIPTION

[Detailed Description of the Invention]
[0001]
[Industrial Application] This invention relates to what operates the set-up timed recording, when the signal which starts image recording equipment (it abbreviates to VTR hereafter), and agrees to the memorized signal inputs.
[0002]
[Description of the Prior Art] When the broadcasting hours of a front program are extended and broadcasting hours are carried down after setting the timed recording of a television broadcasting program as VTR, a front program is recorded by the part of an image transcription beginning of tape on videotape, and, as for the program which set up timed recording, a hind image transcription is cut. For example, continuation broadcast of the program recorded on videotape is carried out, in order to record on videotape what is broadcast each time continuously, when timed recording is set up, the image transcription of a count will become imperfect the middle and relation [ before and after ] will break off. Although what is necessary is just to reset up the image transcription time amount of the time if modification of broadcasting hours can be known in advance, it must reset up next time in order to make timed recording to the usual broadcasting hours, and is troublesome.
[0003]
[Problem(s) to be Solved by the Invention] This invention offers VTR which follows broadcast initiation of a program and starts timed recording actuation according to a broadcast time lag, when it was made in view of such a point, and having set it as timed recording and the broadcasting hours of a certain time become moving down, in order to record on videotape the program by which continuation broadcast is carried out each time.
[0004]
[Means for Solving the Problem] The sound signal input section which inputs a sound signal in order that this invention may solve an above-mentioned technical problem, The A/D-conversion section which samples the signal from the sound signal input section, and is changed into the digital signal according to the amplitude of a signal, The distinction section which distinguishes coincidence as compared with the memory section which memorizes the digital signal from the A/D-conversion section, and the data which read the data based on the sound signal of broadcast inputted from the sound signal input section from the memory section, It becomes by the VTR control section which controls VTR based on the signal from the distinction section etc., and the control section which controls said sound signal input section, the A/D-conversion section, the memory section, the distinction section, and a VTR control section, and VTR which starts actuation of timed recording etc. based on the signal from the distinction section is offered.
[0005]
[Function] When setting it as timed recording in VTR by this invention in order to record a continuation program on videotape continuously since it constituted as mentioned above, data, such as theme music broadcast in the part of the beginning of a program, are memorized beforehand. And as compared with the theme music which is having the voice at the time of image transcription initiation memorized, when in agreement, timed recording is made.
[0006]
[Example] Hereafter, the example of VTR by this invention is explained to a detail based on a drawing. Drawing 1 is the important section block diagram of one example of VTR by this invention. In drawing, 1 is a signal input part and inputs the sound signal or video signal of television broadcasting. 2 is the A/D-conversion section, samples suitably the sound signal or video signal from a signal input part 1, respectively, and changes it into the digital signal according to signal amplitude. 3 is the setting-out section and inputs the command of conversion actuation initiation of the A/D-conversion section 2, and termination. 4 is the memory section and memorizes the digital signal from the A/D-conversion section 2 to a data storage area. 5 is the distinction section and distinguishes the digital signal based on the sound signal or video signal of television broadcasting which inputted from the signal input part 1 and was changed in the A/D-conversion section 2 as compared with the data read from the memory section 4. 6 is a VTR control section and controls VTR based on the signal from the distinction section 5. It is a timer, 7 starts counting of time amount by distinction of the inequality of the distinction section 5, and when a duration passes, it outputs a signal. 8 is a control section and controls each part of equipment.
[0007] Next, actuation of VTR by this invention is explained. Drawing 2 is a flow chart for explaining the actuation which writes the data for considering as the criteria of comparison distinction in memory. The sound signal or video signal received from television broadcasting is inputted from a signal input part 1 (it abbreviates to ST1 step 1 and henceforth). The inputted signal follows the signal from the setting-out section 3 based on the command of necessary processing actuation (ST2), and is inputted

into the A/D-conversion section 2 through a control section 8. And it samples with the time interval which set up the signal to input suitably, and changes into the digital signal which ****s in signal amplitude for every sampling (ST3). Or it is made to sample with a respectively proper time interval according to the frequency set up suitably in the case of a sound signal. The digital signal changed in the A/D-conversion section 2 is transmitted to the memory section 4 through a control section 8, and is written in a data storage area (ST4). The voice or the image memorized in this memory section specifies the theme music used for the first part for example, by the continuation program each time, or the title drawing of a program. In the case of theme music, the time amount length which memorizes in the memory section 4 and suitably When it sets up (for example, in 10 seconds) and theme music begins from an almost silent condition, memorize for 10 seconds from the beginning of music. Or when a silent part is located in the termination part of theme music, the time amount length which memorizes is set as time amount shorter than the die length of theme music, and for [ to said silent part ] 10 seconds (the part of the head of theme music is thrown away) is memorized. moreover, proper in title drawing in the case of a video signal -- it is made to number[ of the fields ]-memorize And it is ordered termination by necessary actuation and the writing of the data to the memory section 4 is ended through a control section 8 (ST5).

[0008] It is a flow chart for explaining actuation of distinguishing whether drawing 3 is in agreement with that the voice or the image of broadcast is beforehand remembered to be after initiation of timed recording of operation, and continuing or stopping timed recording. VTR starts image transcription actuation, when the timed recording start time set up beforehand comes. This inputs the sound signal or video signal received with VTR from a signal input part 1 (ST11). This signal is inputted into the A/D-conversion section 2 through a control section 8, is sampled like the above, and is changed into a digital signal (ST12). These digital signals are inputted into the distinction section 5. And if the stored data of the memory section 4 is the thing of the theme music which begins from a silent condition in the case of a sound signal, although the data for 10 seconds are compared and a silent part is in the termination part of music from the data of the initiation part of music, a case will compare the data for to termination ] 10 seconds. Moreover, the case of a video signal compares data in the number of the necessary fields (ST13). When it is more than the number that the number of the samplings judged to be beyond the rate of concordance that the comparison of data judged the rate of concordance for every sampling, and was set up set up beforehand, a sound signal or a video signal is distinguished from a thing as it was in agreement (ST14:Yes). And it continues timed recording and timed recording is ended in the set-up passage of time (ST16). When data are not in agreement by said ST14 (ST14:No), Until it stops timed recording promptly (ST17) and the time amount by which counting is carried out by the timer 7 turns into time amount set up beforehand henceforth (ST18:No) as compared with the data which carried out reading appearance of the data inputted into the distinction section 5 through the A/D-conversion section 2 from the memory section 4, timed recording (ST19:Yes) is started by coincidence (ST20) -- an image transcription is ended in the end time of timed recording (said ST16). In addition, when the time amount set up while coincidence had not been obtained by the comparison of the data based on the distinction section 5 passes (ST18:Yes), in order that the timed recording of other programs may avoid becoming impossible etc., the way things stand, the timed recording of this time is stopped.

[0009]

[Effect of the Invention] As explained above, in order to record on videotape the continuation program broadcast at this time of day every day, for example according to the VTR by this invention, in spite of having set VTR as timed recording, when the broadcasting hours of the program concerned are carried down, timed recording is stopped, and when the first theme music or title drawing of a program is broadcast, timed recording is once started. Therefore, when making the timed recording of the continuation program of television broadcast at this time of day of this day of the week etc. this time of day or every week every day etc., it is the convenient thing which is not influenced of moving down of broadcasting hours etc.

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[Translation done.]

* NOTICES *



TECHNICAL FIELD

[Industrial Application] This invention relates to what operates the set-up timed recording, when the signal which starts image recording equipment (it abbreviates to VTR hereafter), and agrees to the memorized signal inputs.

[Translation done.]

* NOTICES *



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2.**** shows the word which can not be translated.
3.In the drawings, any words are not translated.

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PRIOR ART

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[Description of the Prior Art] When the broadcasting hours of a front program are extended and broadcasting hours are carried down after setting the timed recording of a television broadcasting program as VTR, a front program is recorded by the part of an image transcription beginning of tape on videotape, and, as for the program which set up timed recording, a hind image transcription is cut. For example, continuation broadcast of the program recorded on videotape is carried out, in order to record on videotape what is broadcast each time continuously, when timed recording is set up, the image transcription of a count will become imperfect the middle and relation [ before and after ] will break off. Although what is necessary is just to reset up the image transcription time amount of the time if modification of broadcasting hours can be known in advance, it must reset up next time in order to make timed recording to the usual broadcasting hours, and is troublesome.

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## EFFECT OF THE INVENTION

[Effect of the Invention] As explained above, in order to record on videotape the continuation program broadcast at this time of day every day, for example according to the VTR by this invention, in spite of having set VTR as timed recording, when the broadcasting hours of the program concerned are carried down, timed recording is stopped, and when the first theme music or title drawing of a program is broadcast, timed recording is once started. Therefore, when making the timed recording of the continuation program of television broadcast at this time of day of this day of the week etc. this time of day or every week every day etc., it is the convenient thing which is not influenced of moving down of broadcasting hours etc.

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TECHNICAL PROBLEM

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[Problem(s) to be Solved by the Invention] This invention offers VTR which follows broadcast initiation of a program and starts timed recording actuation according to a broadcast time lag, when it was made in view of such a point, and having set it as timed recording and the broadcasting hours of a certain time become moving down, in order to record on videotape the program by which continuation broadcast is carried out each time.

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[Translation done.]

* NOTICES *



MEANS

[Means for Solving the Problem] The sound signal input section which inputs a sound signal in order that this invention may solve an above-mentioned technical problem, The A/D-conversion section which samples the signal from the sound signal input section, and is changed into the digital signal according to the amplitude of a signal, The distinction section which distinguishes coincidence as compared with the memory section which memorizes the digital signal from the A/D-conversion section, and the data which read the data based on the sound signal of broadcast inputted from the sound signal input section from the memory section, It becomes by the VTR control section which controls VTR based on the signal from the distinction section etc., and the control section which controls said sound signal input section, the A/D-conversion section, the memory section, the distinction section, and a VTR control section, and VTR which starts actuation of timed recording etc. based on the signal from the distinction section is offered.

[Translation done.]

* NOTICES *



OPERATION

[Function] When setting it as timed recording in VTR by this invention in order to record a continuation program on videotape continuously since it constituted as mentioned above, data, such as theme music broadcast in the part of the beginning of a program, are memorized beforehand. And as compared with the theme music which is having the voice at the time of image transcription initiation memorized, when in agreement, timed recording is made.

[Translation done.]

* NOTICES *



## DESCRIPTION OF DRAWINGS

[Brief Description of the Drawings]
[Drawing 1] It is the important section block diagram of one example of the image recording equipment by this invention.
[Drawing 2] It is a flow chart for explaining actuation of the image recording equipment by this invention.
[Drawing 3] It is a flow chart for explaining actuation of the image recording equipment by this invention.
[Description of Notations]
1 Signal Input Part
2 A/D-Conversion Section
3 Setting-Out Section
4 Timer
5 Memory Section
6 Distinction Section
7 VTR Control Section
8 Control Section

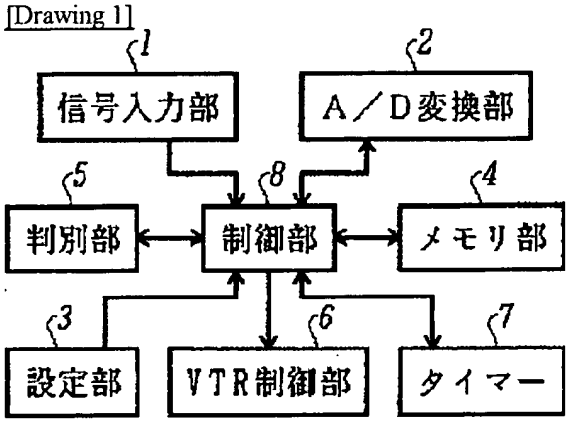
[Translation done.]

* NOTICES *



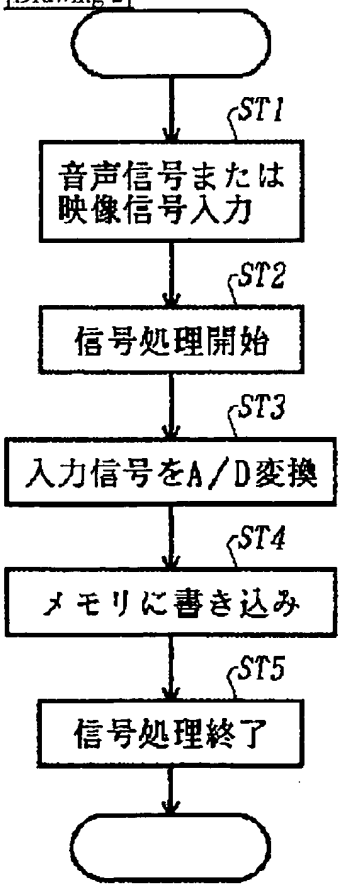
DRAWINGS

[Drawing 1]

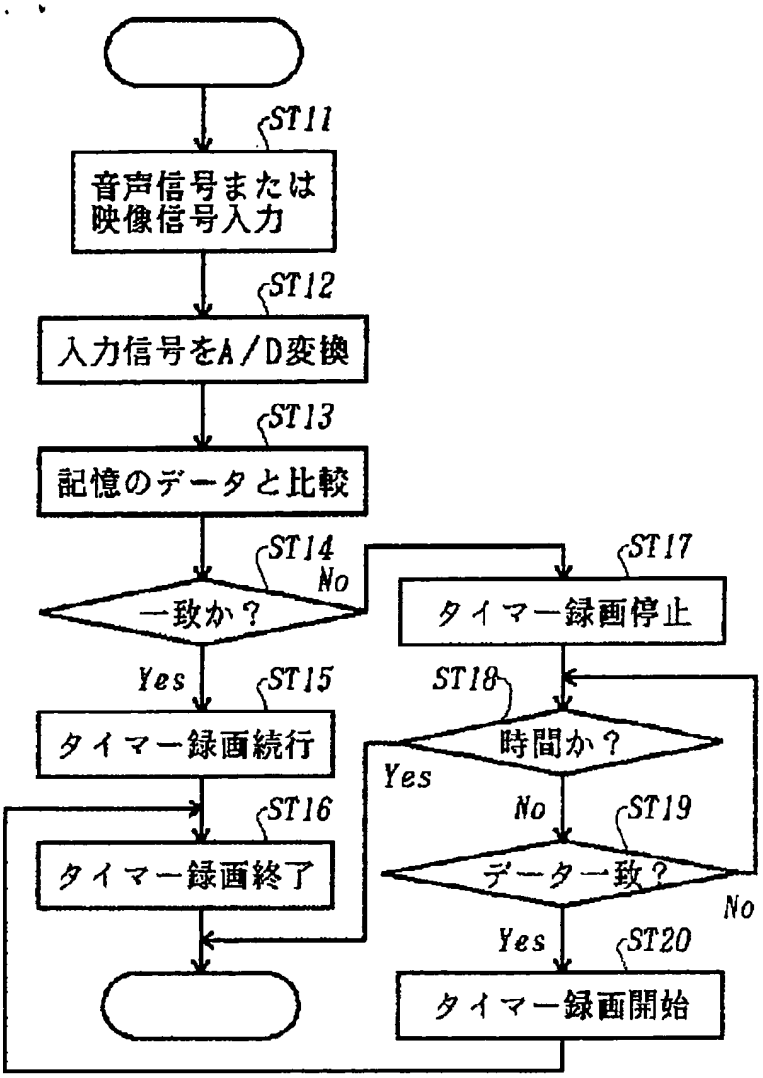



1: Signal input part
2: A/D
3: Setting section
4: Memory
5: distinction section
6: VTR Control
8: Controler

[Drawing 2]




[Drawing 3]

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